

# PJM Summer 2018 Operations Update

Illinois Commerce Commission

May 10, 2018

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Operations

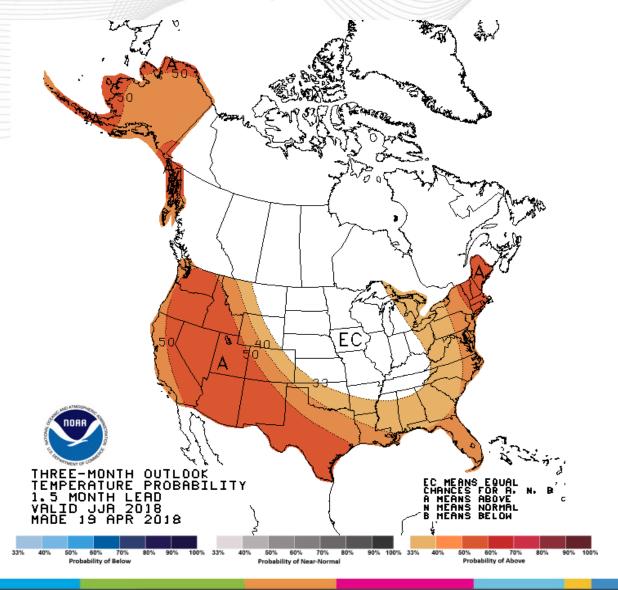
Evelyn Robinson, Managing Partner – State and Government Affairs



# Summer 2018 Temperature Prediction

Current forecast suggests a higher probability of above average temperatures for the entire RTO.

There is a greater chance of above average temperatures in the eastern half of the RTO than in the west.





# PJM Load and Capacity Comparison: 2017 vs. 2018

### 2017

Forecast Load (MW) Total	Demand Response (MW)	Forecast Load Less Demand Response (MW)	Installed Generation Capacity (MW)	Reserve Margin (MW)	Reserve Margin	Required Reserve Margin
152,999	9,120	143,879	185,804	41,925	29.1%	16.6%

#### 2018

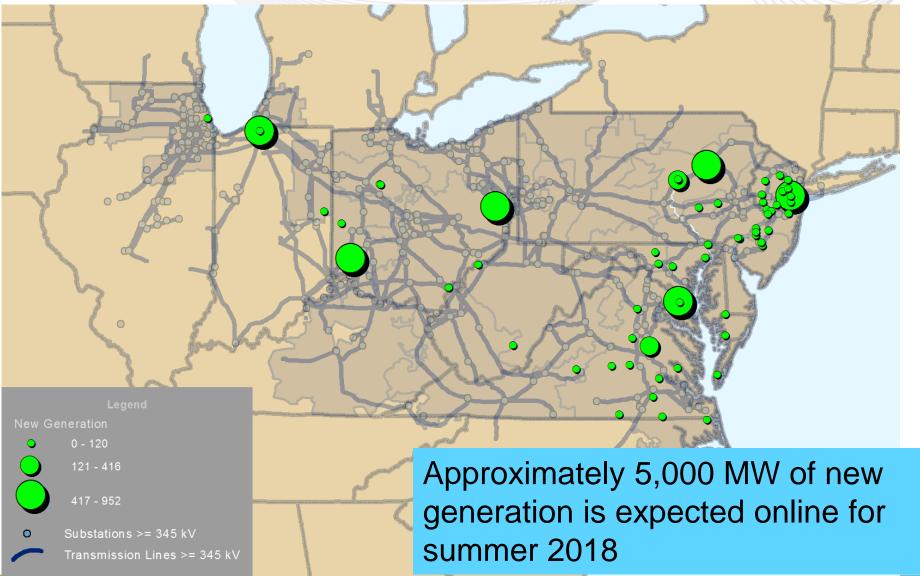
Forecast Load (MW) Total	Demand Response (MW)	Forecast Load Less Demand Response (MW)	Installed Generation Capacity (MW)	Reserve Margin (MW)	Reserve Margin	Required Reserve Margin
152,108	9,095 <sup>1</sup> (est.)	143,013	184,010	40,997	28.7% 👢	16.1% 👢

<sup>1</sup>DR estimate is based on methodology used in RTEP and described in PJM Manual 19

2017 (Metered Peak Load: 145,331 MW on 7/19/17 at HE 18)



### **New Generation**



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Transmission Upgrades



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50/50 Non-diversified Peak Load	0/50 Non-diversified Peak Load Base Case		
LAS Load Forecast	158,010 MW		
Preliminary RTO Net Interchange	4,150 MW** (Importing)		
PJM RTO Installed Capacity	184,010 MW		
Discrete Generator Outages	12,285 MW		

<sup>\*\* 4,150</sup> MW of net interchange is modeled in the OATF base case and accounts for external pseudo tied capacity resources.

### **Study Complete**

- No reliability issues identified for base case and N-1 analyses
- Some off-cost generation re-dispatch required to control local thermal issues
- All voltage issues were resolve with capacitors
- Sensitivity studies no concerns identified



# Summer Preparedness

- Summer Seasonal Assessment
- Conduct emergency drills to ensure readiness
- System Operator Training
- Assess the weather outlook daily
- Review projected load and capacity
- Coordinate with neighboring systems to discuss the upcoming season conditions





# Capacity Procedures Overview

#### Alerts

Maximum
Generation
Emergency/ Load
Management Alert

Primary Reserve Alert Voltage Reduction Alert Warnings

Primary Reserve Warning Voltage Reduction Warning & Reduction of Non-Critical Plant Load Manual Load Dump Warning

#### Actions

Pre-Emergency Load Management Reductions Emergency Load Management Reductions Maximum Generation Emergency Emergency Voluntary Energy Only Demand Response Reductions

Deploy All Resources Action

Curtailment of Non-Essential Building Load & Voltage Reduction

Manual Load Dump